

**Dana C. Hewins, Ph.D.**  
*Economic Consultant*  
1 Tamett Brook Road  
Lakeville, Massachusetts 02347  
508-946-1116 Fax: 508-947-5151

**AN EVALUATION OF THE PROBABLE  
NET LOST COMPENSATION  
AND  
LOST HOUSEHOLD SERVICES OF  
GRIGORY CHIZHIK**

Report prepared  
for  
David B. Kaplan, Esquire

June 1, 2005

In response to your request, I have evaluated the probable net lost future compensation and lost household services which resulted from the death of Grigory Chizhik on May 25, 2003. My analyses employed the standard methodology used by economists to determine the present values of future economic losses, and were based on data from both private and public sources.

## **BACKGROUND**

Grigory Chizhik was born on July 25, 1955. He was raised and educated in Russia where he completed the equivalent of an American high school education. In 1989 he emigrated to the United States where he worked initially as a cab driver and later, in the years preceding his death, as a van driver. He is survived by his wife, Zhanna, who was born on March 11, 1959, and two adult children.

## **METHODOLOGY**

In order to determine the net lost future compensation of Grigory Chizhik, it was necessary first to calculate the present value of the compensation he would probably have earned, had he lived, and then subtract the amount of income which would have been spent exclusively on his own personal consumption. This difference between his lost future compensation and his own personal consumption expenditures is the proper measure of the net economic loss to his survivors.

Expressed simply, the present value of this net economic loss is equal to the lump-sum amount one would need to invest, at an appropriate interest rate, in order exactly to replace, on a year-by-year basis, the monetary benefits which have been lost by his survivors. Mathematically speaking, the present value of this net economic loss was calculated by "discounting" all relevant dollar amounts by the appropriate interest rate.

For purposes of this analysis, all projected compensation totals were reduced to present value by using a *taxable* discount rate of 2.5 percent, a rate approximately equal to the average annual "real" (i.e., inflation-adjusted) yield on three-year government securities for the past 30 years. In contrast, all projected lost household services were reduced to present value by using a *nontaxable* discount rate of 2.0 percent, a rate approximately equal to the average annual "real" (i.e., inflation-adjusted) yield on high-grade municipal bonds for the past 30 years.

Using real discount rates in tandem with real growth rates eliminates the need to forecast inflation rates and is the standard methodology employed by economists to determine the present values of future economic losses. Please note also that the 2.0 percent and the 2.5 percent real discount rates used here are well within the 1 to 3 percent range which the U.S. Supreme Court found to be reasonable in *Jones & Laughlin Steel Corporation v. Pfeiffer*, 103 S.Ct. 2541 (1983).

## **DATA AND ASSUMPTIONS**

In addition to the 2.5 percent real discount rate, the evaluation of Mr. Chizhik's lost future compensation required assumptions regarding worklife expectancy, compensation, and compensation growth rates.

**Worklife Expectancy** - In its 1986 publication entitled, *Worklife Estimates: Effects of Race and Education*, the U.S. Department of Labor (DOL) published worklife expectancy estimates for American workers, estimates which explicitly allowed for events such as premature death, disability, and voluntary early retirement. These worklife expectancy estimates were based on labor force data for 1979 and 1980, however, and are now widely regarded as outdated.

Using exactly the same methodology employed by the DOL to compute worklife expectancies, but using more recent (1996-98) labor force data, Richards and Abele have calculated that the worklife expectancy of a currently-active male, aged 47 years (Mr. Chizhik's age at the time of his death), who has completed a high school education is 14.8 years (Richards and Abele, 1999, p. 172).

**Compensation** - According to tax records, Grigory Chizhik earned \$21,278 after expenses in 2001, and \$24,521 in 2002. In 2003, he earned \$10,611 through May 25, the date of his death. On an annual basis, this implies earnings of about \$26,500. In view of these data, it was assumed, for purposes of this evaluation, that Mr. Chizhik's annual rate of pay was approximately \$26,500 at the time of his death in 2003.

**Compensation Growth Rate** - It was assumed here that Grigory Chizhik's compensation would have increased in the future (from 2003, onward) at the real (inflation-adjusted) average annual rate of 1.0 percent per year, had he lived. This rate of increase is similar to the actual average annual rate of increase in the compensation of workers in the northeast over the past two decades according to the U.S. Department of Labor's Employment Cost Index. It is also approximately equal to the average annual real rate of increase in the compensation of the average American worker over the past several decades according to data published in the most recent (2005) *Economic Report of the President* (Table B-50). Furthermore, it is the same real growth rate currently being used by the Social Security Administration in its so-called "intermediate projection" of future compensation growth.

## **ECONOMIC ANALYSIS**

The lost compensation of Grigory Chizhik was projected from May 25, 2003, the date of his death, to the end of his 14.8-year statistically-expected worklife. It was assumed that his base-year (2003) annual compensation level of \$26,500 would have increased in the future at the real average annual rate of 1 percent, had he lived. Given these parameters, and employing a real discount rate of 2.5 percent, the present value of Grigory Chizhik's lost future compensation was determined to be \$353,325 when calculated as of January 14, 2004, the date of filing of the complaint. The date of filing was used for all present value calculations in accordance with *Griffin v. General Motors*, 380 Mass. 362 (1980).

As noted earlier, however, personal consumption expenditures which would have *exclusively* benefited the decedent must be subtracted from lost compensation in order to determine the net economic loss to a decedent's survivors. In this case, Mr. Chizhik's lost future compensation was reduced by 50 percent to allow for his own personal consumption.

This consumption percentage was chosen on the basis of a careful review of the personal consumption literature, especially those studies which have in various ways analyzed the data compiled by the U.S. Department of Labor in its on-going *Consumer Expenditure Survey* in order to determine the impact of sex, family size, and income level on personal consumption. Foremost among these studies of personal consumption have been a series of articles authored since 1991 by Robert Patton, David Nelson, and their associates (Ruble, et al., 2002). Applying this consumption percentage to Mr. Chizhik's projected compensation yielded a present value for the probable lost compensation, net of personal consumption, of \$176,663.

### **METHODOLOGY: LOST HOUSEHOLD SERVICES**

Measuring the market value of Grigory Chizhik's lost household services required several steps. To begin, the average annual number of hours that Mr. Chizhik probably would have devoted to household services, had he lived, had to be established based upon the best published data available. Next, a reasonable market wage rate for evaluating household services had to be determined. By multiplying the annual number of hours by the appropriate market wage rate, it was possible to calculate the market value of Mr. Chizhik's lost household services when measured in 2003 dollars. This market value was then projected from May 25, 2003, to age 75, and reduced to present value.

Many studies of household services have been published over the past several decades. The best known of these studies have been compiled and published by analysts at Cornell University in co-operation with the U.S. Department of Agriculture. These researchers have produced a series of three studies which were published in 1973, 1980, and 1992, respectively.

After reviewing the Cornell data, as well as a recent survey of other published studies (Martin and Vavoulis, 2003, ch. 6), it was determined that Grigory Chizhik would have probably devoted an average of about 12 hours per week to household services, had he lived.

In establishing the wage rates to employ in order to calculate the dollar values of the lost household services of Mr. Chizhik, it was necessary to review published wage data for occupations such as maintenance repairers, general maintenance workers, janitors and cleaners, and landscaping and groundskeeping laborers. The most useful of these data have been compiled by the Massachusetts Division of Employment and Training in its *Massachusetts Occupational Wage Statistics* series. After reviewing these wage data for the Brockton Service Delivery Area (an area which includes the late Mr. Chizhik's hometown of Stoughton), it was determined, all things considered, that a 2003 wage rate of \$10.00 per hour would be reasonable for evaluating the lost household services of Grigory Chizhik.

### ECONOMIC ANALYSIS

The economic value of Grigory Chizhik's lost household services was projected from May 25, 2003, to age 75, or for a period of 27.16 years. It was assumed that he would have devoted an average of 12 hours per week to household services, had he lived. Given a market wage rate of \$10.00 per hour, this yields a base-year (2003) annual value of household services of \$6,240.

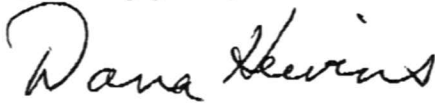
It was further assumed that the market value of these household services would increase in the future at the real long-term earnings growth rate of 1 percent. Given these parameters, and using a real nontaxable discount rate of 2.0 percent, the present value of Grigory Chizhik's lost household services was determined to be \$148,982 as of the date of filing.

## CONCLUSIONS

The present value of Grigory Chizhik's probable lost compensation, net of his own personal consumption, was calculated to be \$176,663. In addition, the present value of his lost household services was determined to be \$148,982. Combining net lost compensation and the market value of lost household services yields an **overall economic loss of \$325,645**. Please recall that these present values were calculated as of January 14, 2004, the date of filing of the complaint.

Please be advised also that these results may be revised if and when additional information becomes available. If I can be of any further service to you in this matter, please do not hesitate to contact me.

Sincerely yours,

A handwritten signature in cursive script, reading "Dana Hewins".

Dana C. Hewins, Ph.D.

**Selected References**

Bryant, W. Keith, et al., *The Dollar Value of Household Work*, revised edition, Ithaca, NY: College of Human Ecology, Cornell University, 1992

Gauger, William, and Kathryn Walker, *The Dollar Value of Household Work*, Ithaca, NY: Cooperative Extension, Cornell University, 1980

Jacobs, Eva E., ed., *Handbook of U.S. Labor Statistics*, eighth edition, Lanham, MD: Berman Press, 2005

Martin, Gerald D., and Ted Vavoulis, *Determining Economic Damages*, Costa Mesa, CA: Grigory Publishing, 2003

McConnell, Campbell, et al., *Contemporary Labor Economics*, sixth edition, New York: McGraw-Hill, 2003

President's Council of Economic Advisers, *Economic Report of the President, 2005*, U.S. Government Printing Office, 2005

Richards, Hugh and Jon Abele, *Life and Worklife Expectancies*, Tuscon, Arizona: Lawyers and Judges Publishing Co., 1999.

Ruble, Michael R., Robert T. Patton, and David M. Nelson, "Patton-Nelson Personal Consumption Tables, 1999-01: Updated and Revised," *Journal of Forensic Economics*, Fall 2002, pp. 295-301.

U.S. Department of Commerce, *Statistical Abstract of the United States, 2004-05*, U.S. Government Printing Office, 2004

U.S. Department of Labor, *Occupational Outlook Handbook, 2004-05*, U.S. Government Printing Office, 2004

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June 2, 2005

David B. Kaplan, Esquire  
The Kaplan/Bond Group  
88 Black Falcon Avenue, Suite 301  
Boston, MA 02210

Re: Zhanna Chizbik v. Sea Hunt, Inc., et al.

Dear Attorney Kaplan:

This letter is being written in response to your request for information concerning my hourly rates, publications, and appearances at trial and deposition. To begin, please be advised that my current hourly rate for all professional services is \$250.00.

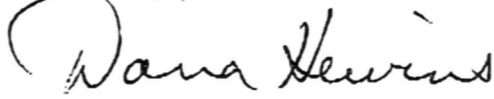
With respect to publications in the past decade or so, I wrote an article entitled "Measuring Damages in Personal Injury Cases" in *Proving Damages in Personal Injury Cases* (Massachusetts Bar Association, 1993); "Measuring Damages in Cases Involving Head Injuries" in *Preparation and Trial of the Traumatic Brain Injury Case* (Lorman Education Services, 1997); and a case study on measuring

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economic loss in a case involving catastrophic burns in *Proving or Disputing Damages* (Suffolk University Law School, 1998).

Finally, I am also sending you a complete listing of the depositions and trials at which I have appeared in the past four years. Should you require any additional information, please do not hesitate to contact me.

Sincerely yours,

A handwritten signature in cursive script that reads "Dana Hewins". The signature is written in dark ink and is positioned above the printed name.

Dana C. Hewins, Ph.D.

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### APPEARANCES AT TRIAL, 2001-2005

<u>ATTORNEY</u>	<u>PLAINTIFF</u>	<u>COURT</u>	<u>MONTH/YEAR</u>
Barry Reed	Melissa Maietta	MA Superior (Cambridge)	6/01
Kevin Seaver	Kenneth Labo	MA Probate (Marlboro)	7/01
Daniel Lindley	Paul Paluzzi	MA Superior (Boston)	9/01
Paul Mitchell	William Binley	MA Superior (Dedham)	10/01
William Wheatley	Gilda DeMelo	MA Superior (Taunton)	10/01
Thomas Beliveau	Rico Autori	MA Superior (Newburyport)	10/01
William Thompson	Jose Monteiro	MA Superior (Cambridge)	1/02
Francis J. Lynch, III	Michael Rivard	MA Superior (Boston)	1/02
Paul Epstein	Joseph Mari	MA Superior (Boston)	1/02
Daniel Lindley	Paul Paluzzi	MA Superior (Boston)	2/02
Robert Gabler	Christopher Lever	MA Superior (Boston)	2/02
Kenneth Margolin	Joseph Rice	MA Superior (Boston)	3/02
John Spinale	George Millette	MA Probate (Brockton)	3/02
Peter Antell	Kim Gordon	MA Superior (Boston)	5/02
Peter Eleey	Mary Cooper	MA Superior (Boston)	8/02
Mark Dolan	Judith Oliveira	RI Superior (Providence)	8/02
David Ward	John Grondalski	Federal (Boston)	8/02
Kimberly Winter	Nicholas Vanelli	MA Superior (Plymouth)	9/02
Steven Ferrarone	Joseph Weiss	MA Superior (Cambridge)	10/02
Jennifer Rosen	Michael Morin	MA Superior (Pittsfield)	10/02
Michael Heineman	Joseph Moutinho	MA Superior (Worcester)	10/02
Henry Owens	Joseph Simon	MA Superior (Cambridge)	1/03
Chris O'Connor	Katherine Marek	MA Superior (Fall River)	1/03
Geoffrey Domenico	Dominic La Greca	MA Superior (Brockton)	2/03
Paul Leavis	Mark Stymest	MA Superior (Lowell)	3/03

Kevin Phelan	Rebekha Abreu	Federal (Boston)	3/03
Steven Coren	Kelly Shanahan	MA Superior (Dedham)	3/03
Leonard Simon	Kelly Sipe	MA Superior (Boston)	4/03
Frederic Halstrom	Magan Sliney	Federal (Boston)	5/03
Marie Mercier	Samuel Natowicz	MA Superior (Cambridge)	5/03
Kevin Peters	Benjamin Schwartz	Federal (Boston)	6/03
Richard Brody	Odin Anderson	MA Superior (Cambridge)	6/03
Andrew Fischer	Curtis Evans	MA Superior (Boston)	9/03
Larri Parker	Mark Davio	MA Superior (Worcester)	9/03
David Dwork	John Stevenson	MA Superior (Cambridge)	10/03
Charles Capace	Zewdew Lakew	MA Superior (Cambridge)	12/03
Lisa Arrowood	Richard Gladu	MA Superior (Cambridge)	1/04
Carolyn Latti	Steven Reeves	Federal (Boston)	3/04
Thomas Hoffman	David Daigle	MA Superior (Dedham)	3/04
James Ackerman	Isabella Swenson	Federal (Boston)	5/04
Peter Montgomery	Keith Leete	MA Superior (Worcester)	5/04
Elizabeth Mulvey	George Goodrich	MA Superior (Boston)	6/04
Andrew Rainer	John Zabilansky	MA Superior (Cambridge)	6/04
Sidney Gorovitz	Kimiyoshi Matsuyama	MA Superior (Dedham)	7/04
John Prescott	Jose Torres	MA Superior (Worcester)	8/04
Charles Alpert	Novella Earl	MA Superior (Dedham)	8/04
Richard Corbett	Henry Dulaurence	MA Superior (Boston)	8/04
Frederick Pritzker	Marcia Rhodes	MA Superior (Dedham)	9/04
Leonard Simon	Stephen Morgan	Federal (Boston)	9/04
Sidney Gorovitz	Joseph Flaucher	MA Superior (Dedham)	10/04
Elizabeth Mulvey	Bruce Daniels	MA Superior (Cambridge)	11/04
Russell Pollock	Jessica Fiasconaro	MA Superior (Barnstable)	12/04
Stephen Clapp	Jennifer Quigley	MA Superior (Boston)	2/05
Paul Leavis	Hae Hyon Choi	MA Superior (Boston)	3/05
Elizabeth Mulvey	Anthony Tarquinio	MA Superior (Lawrence)	3/05
Patrick Jones	Sara Boyle	RI Superior (Providence)	4/05
Michael Weisman	Jason McIntyre	MA Superior (Boston)	4/05
Daniel Treger	David Wright	Federal (Worcester)	4/05

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## **APPEARANCES AT DEPOSITION, 2001-2005**

<b><u>ATTORNEY</u></b>	<b><u>PLAINTIFF</u></b>	<b><u>LOCATION</u></b>	<b><u>MONTH/YEAR</u></b>
Michael Lynn	Leo Cormier	Boston	12/01
John LeGrand	Greg Martin	Somerville	3/02
Henry Owens, III	Joseph Simon	Boston	5/02
David Kaplan	Philip Ashworth	Boston	1/03
Gerard Mahaney	Kevin Johnson	Natick	1/03
David Anderson	Steven Reeves	Boston	6/03
Maureen Counihan	Philip Pallone	Wellesley	11/03
Garry Lane	Sherry Tasker	Boston	12/03
Richard Corbett	Henry DuLaurence	Boston	3/04
James Ackerman	Magi Swenson	Boston	3/04
David Heinlein	Vincent Spencer	Boston	6/04
Gerald Cook	Lisa Campbell	Melrose	6/04
Frederic Halstrom	Brian Longley	Boston	9/04
Kevin Phelan	Robert Motta	Boston	9/04
David Suchecki	Timothy Johnson, Jr.	Boston	10/04
Alan Cantor	Brian Manning	Boston	1/05

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### **QUALIFICATIONS**

Dr. Dana C. Hewins is an economist who has had more than thirty years of academic and consulting experience. Educated in economics at Tufts University (Bachelor of Arts), the University of Chicago (CIC Traveling Scholar), the University of Illinois (Master of Arts, Doctor of Philosophy in Economics), and Harvard University (postdoctoral study), Dr. Hewins specializes in the areas of labor economics, health care economics, and forensic economics.

Dr. Hewins taught at Ohio University from 1973 to 1982. In 1981, he was named University Professor by Ohio University, the highest honor bestowed by that university for excellence in teaching. After serving as a visiting professor at Tufts University in 1983, he joined the staff of Regis College where he served as Chairman of the Department of Economics for many years prior to his decision to opt for early retirement in the Spring of 2002.

Since 1983, Dr. Hewins has provided economic analyses in a wide variety of legal proceedings. These proceedings have included personal injury, wrongful death, wrongful termination, lost profits, malpractice, divorce, discrimination, and antitrust actions. He has served both plaintiffs and defendants, and has testified in state and federal courts throughout Massachusetts.

Dr. Hewins has also served as an economic consultant to many organizations and institutions, including the Ohio Supreme Court, the Appalachian Regional Commission, and the Area Six Health Systems Agency. His research on a variety of topics has been published in periodicals such as the *American Bar Association Journal*, *Economic Inquiry*, the *Review of Social Economy*, the *I.C.C. Practitioner's Journal*, the *Quarterly Review of Economics and Business*, and the *Massachusetts Lawyer's Weekly*. He is a Director and past Chairman of the Board of the Bridgewater Savings Bank, and a member of the American Economic Association, the American Academy of Economic and Financial Experts, and the National Association of Forensic Economics.

--VITA--

Dana C. Hewins, Ph.D.  
1 Tamett Brook Road  
Lakeville, Massachusetts 02347

Telephone: 508-946-1116

**EDUCATION**

B.A. in Economics, Tufts University, 1968  
M.A. in Economics, University of Illinois, 1970  
CIC Traveling Scholar, University of Chicago, 1970-71  
Ph.D. in Economics, University of Illinois, 1975  
Postdoctoral study, Harvard University, 1982-84

**ACADEMIC EXPERIENCE**

University of Illinois, 1972-73  
Ohio University, 1973-82  
Tufts University, 1982-83  
Regis College, 1984 to 2002

**OTHER PROFESSIONAL EXPERIENCE**

Research Assistant and Staff Writer, Bureau of Economic and Business Research,  
University of Illinois, 1969 to 1973

Member of the Board of Directors of the federal Area Six Health Systems Agency,  
1977 to 1980

Vice President and Senior Economist, Commonwealth Research Group, Boston,  
Massachusetts, 1983 to 1990

Director and past Chairman of the Board of the Bridgewater Savings Bank, 1987  
to present

### **SELECTED PROFESSIONAL ACTIVITIES**

Deputy Director of a project which resulted in the publication of the first comprehensive economic abstract for the state of Illinois, 1971 to 1974

Member of a research team selected by the Appalachian Regional Commission to evaluate the costs and benefits of emergency medical services in rural areas, 1975 to 1977

Member of a task force appointed by the Ohio Supreme Court to assess the efficiency of Ohio's municipal court system, 1977 to 1979

Member of a research team selected by the Ohio Nursing Home Association to evaluate the econometric methodology employed by the state of Ohio to set prospective reimbursement rates for Ohio nursing homes, 1979 to 1980

Member of a research team which performed a quantitative evaluation of the relationship between the usage of radar detectors and automobile accident rates, 1987 to 1988

Member of a research team chosen by the United States Air Force to determine which weapon systems should be funded on a multi-year procurement basis, 1988 to 1989

Author of articles, reviews, and comments on a variety of topics which have been published in periodicals such as the *American Bar Association Journal*, *Economic Inquiry*, the *Review of Social Economy*, the *I.C.C. Practitioner's Journal*, the *Quarterly Review of Economics and Business*, and the *Massachusetts Lawyer's Weekly*

Member of the American Economic Association and the National Association of Forensic Economics

### **HONORS AND AWARDS**

Designated Uniroyal Scholar at Tufts University, 1967 to 1968

Named CIC Traveling Scholar, University of Chicago, 1970 to 1971

Awarded honorary title of University Professor by Ohio University, 1981